State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawai'i 96813

September 12, 2008

Chairperson and Members
Board of Land and Natural Resources
State of Hawai'i
Honolulu, Hawai'i

Land Board Members:

SUBJECT: APPROVAL OF HABITAT CONSERVATION PLAN FOR THE CONSTRUCTION AND OPERATION OF THE LĀNA'I METEOROLOGICAL TOWERS, LĀNA'I, HAWAI'I, AND INCIDENTAL TAKE LICENSE.

SUMMARY:

Submitted for your approval is the "Habitat Conservation Plan for the Construction and Operation of the Lāna`i Meteorological Towers, Lāna'i, Hawai'i" (Attachment I), and Incidental Take License (Attachment II). The purpose of this Habitat Conservation Plan (HCP) is to mitigate for potential injury and death to endangered 'Ua'u (Hawaiian petrel, *Pterodroma sandwichensis*), 'A'o (Newell's shearwater, *Puffinus auricularis newelli*), Ae'o (Hawaiian stilt, *Himantopus mexicanus knudseni*), and 'Ōpe'ape'a (Hawaiian hoary bat, *Lasiurus cinereus semotus*) caused by project construction and operation. A summary of changes to the HCP since the previous review is attached (Attachment III).

BACKGROUND:

Castle & Cooke Resorts, LLP (Castle & Cooke) is the current developer of the Lāna'i Meteorological Towers project and, along with its affiliates, owns 98 percent of the land on the island of Lāna'i. The current project includes the construction and operation of seven meteorological towers for the purpose of determining the feasibility of a wind energy project at that location. On August 8, 2007, DLNR issued Castle & Cooke a Conservation District Use Permit (CDUP No. LA-3419) for the installation of one met tower at site number 6 and conditionally approved installation of the remaining six met towers. The first met tower was constructed and has been in operation since August 2007; five additional towers were constructed and have been in operation since February 2008. The final tower has not yet been installed.

Four state and federally listed endangered or threatened animal species have been documented on Lāna'i within the vicinity of the wind resource area (WRA) where the

met towers are located. The incidental take of listed species has the potential to occur as a result of the construction and operation of the seven met towers within the WRA, endangered 'Ua'u (Hawaiian petrel, *Pterodroma sandwichensis*), 'A'o (Newell's shearwater, *Puffinus auricularis newelli*), Ae'o (Hawaiian stilt, *Himantopus mexicanus knudseni*), and 'Ōpe'ape'a (Hawaiian hoary bat, *Lasiurus cinereus semotus*). Individuals of these species may fly in the vicinity of a met tower and could be injured or killed if one collides with a met tower or associated guy wires.

No habitat loss for listed wildlife species will occur. Additionally, no other listed, proposed or candidate wildlife species have been found or are known to be present in the project area. Botanical surveys conducted in April and late-November 2007 determined that no federally or state-listed plant species occur within any of the met tower footprints. Therefore, no impacts will occur to sensitive plant species as a result of this project.

Complete avoidance of risk to the four listed wildlife species is not possible for the project; therefore, Castle & Cooke has taken a number of measures minimize the risk of collisions. They have constructed the towers on the western side of the WRA to maximize the distance from the existing petrel colony on Lāna'i, in order to minimize risk of collision. Castle & Cooke also removed met tower number 8 (the eastern-most proposed tower site) from further consideration in the project in order to minimize the number of towers erected, and to reduce the potential for collision with a met tower or guy wire. They have also taken a number of measures to maximize the visibility of the met towers and guy wires while ensuring that meteorological data collection is not compromised. No lighting is needed for the met towers because they are less than 200 feet high. In addition, radar and visual studies are being conducted to identify the movements, behavior, as well as flight altitudes for the seabirds and bats.

A monitoring and adaptive management program has been implemented and will be continued for the life of the project, to ensure that take limits are not exceeded and that the habitat restoration and predator control programs are achieving their expected benefits. Castle & Cooke will continue to conduct post-construction mortality monitoring (downed wildlife surveys) to document injuries or fatalities of listed and non-listed species. Monitoring was conducted for met tower 6 in 2007 and was initiated in March 2008 to include all met towers from March 15 to December 15 (or when the birds are known to be present on the island), and will continue as long as the towers are in operation, according to the procedures outlined in the HCP. Post-construction monitoring will identify whether threatened or endangered bird and bat species are injured or killed from collision with one or more of the towers and will document impacts to other non-listed species. Castle & Cooke will prepare a Wildlife Education and Observation Program for all staff members who will be on the property on a regular basis. Should monitoring reveal that authorized take of petrels is higher at one of the tower locations as a result of collision with a met tower, Castle & Cooke would closely evaluate the data and consider removing the tower in question.

Mitigation proposed for each of the four listed species is designed to not only compensate for take that may occur as a result of collision with met towers, but also provide a net conservation benefit for the species addressed. Site-specific radar and avian point count

surveys have determined that, of the four listed species addressed within this HCP, the Hawaiian petrel represents the species at greatest risk of take from collisions with met towers. Castle & Cooke consulted with DOFAW and USFWS and determined that, of the mitigation strategies available, a combination of habitat restoration and predator trapping in the Lāna`ihale would both compensate for take and result in a net conservation benefit for the petrel.

Three or six acres of native habitat (depending on the amount of take) will be restored to provide nesting habitat for Hawaiian petrels and Newell's shearwaters, and potential roosting and foraging habitat for Hawaiian hoary bats. As part of mitigation, Castle & Cooke will augment DOFAW's current predator trapping program both at Lāna`ihale and at the Lāna'i City wastewater treatment plant ponds, currently used as a nesting site for Hawaiian stilts. DOFAW may consider installing artificial burrows in the Lāna'ihale to encourage colonization if the birds do not start using the restored habitat on their own. In sum, the combination of restoring 3 acres (or 6 acres if the Tier 1 limit is reached) of habitat, and conducting predator removal within the Lāna'ihale and the Lāna'i City wastewater treatment plant ponds, will compensate for any take within the take limits, and provide a net conservation benefit for the affected species.

Following discussion with Castle & Cooke, it was determined that the mitigation for this project complements the ongoing Hawaiian petrel recovery project currently conducted by DOFAW in collaboration with USFWS and the University of Hawaii. As a result, DOFAW has agreed to implement the mitigation work on Lāna`ihale, in order to best benefit the conservation of the species. A Memorandum of Agreement for this mitigation work, as detailed in Appendix 7 of the HCP, is currently being drafted, will be reviewed by ESRC, and will be submitted to the BLNR for decision-making.

Quarterly reports will be submitted to DOFAW and USFWS. These reports will summarize the results of the post-construction monitoring surveys, document take if any, and recommend any changes needed to the monitoring protocol. Any incidental take of one of these covered species will be reported within 24 hours and the cumulative adjusted take reported within two weeks. Castle & Cooke will also conduct semiannual meetings with DOFAW and USFWS to discuss the monitoring program, compare the monitoring results to estimated take levels, discuss the progress of the mitigation measures, and develop any recommendations for revising on-going activities.

Notice of public hearing was published in the Maui News on April 6, 2008. A public hearing was held on April 11, 2008 in Lanai City, Island of Lāna'i, Hawai'i (Public Hearing Notice DOFAW08-4) to receive testimony on the Habitat Conservation Plan and Incidental Take License. Copies of the HCP and ITL were available for inspection at the Hawaii State Main Library, Lanai Public Library, the DOFAW offices in Honolulu and Wailuku, and online at http://www.state.hi.us/dlnr/dofaw/pubs/index.html. Concerns over potential impacts over a future wind project were expressed during the public meetings, but no concerns over the current meteorological tower project. No written comments were received from the public concerning this project.

Castle & Cooke will provide funding to implement the activities outlined in the HCP. Castle & Cooke has demonstrated sufficient financial assets to implement the terms of this HCP. Castle & Cooke will be responsible for funding the post construction fatality monitoring and mitigation and understands that failure to provide adequate funding and a consequent failure to implement the terms of this HCP in full could result in a temporary permit suspension or permit revocation. The first payment ($143,138) was provided to DOFAW in February 2008 for Year 1 of Tier 1, and the remainder of Tier 1 costs ($109,065) will be paid within 10 working days of the Castle & Cooke's receipt of the approved ITP/ITL. DOFAW Castle & Cooke will implement additional conservation and mitigation measures deemed necessary to respond to changed circumstances as provided for and specified in the HCP's adaptive management strategy.

The ESRC has reviewed the revised HCP and their comments are submitted as Attachment IV. The ESRC findings are that the document meets the requirements of the statute and recommends that the Board approve the document as submitted. The Division also concurs that this HCP will result in a net conservation benefit to the species. The Attorney General has provided preliminary approval as to form of the HCP.

RECOMMENDATION:

That the Board approve the Habitat Conservation Plan for Habitat Conservation Plan for the Construction and Operation of the Lāna'i Meteorological Towers, Lāna'i, Hawai'i, and the accompanying Incidental Take License, by the required two-thirds vote of the authorized membership. The issuance of the Incidental Take License will be conditional upon the receipt of the $109,065 to cover the remaining costs of mitigation and monitoring described in the HCP.

Respectfully submitted,

Paul J. Conry, Administrator
Division of Forestry and Wildlife

APPROVED FOR SUBMITTAL:

Laura H. Thielen, Chairperson
Board of Land and Natural Resources